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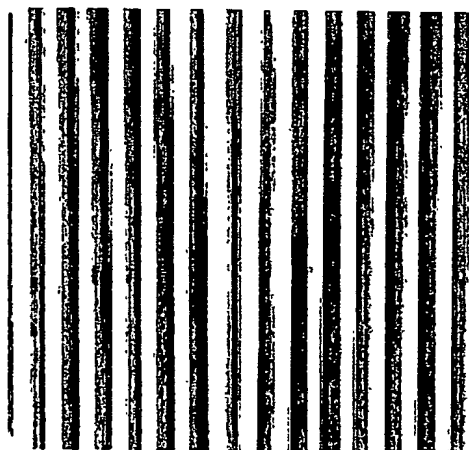
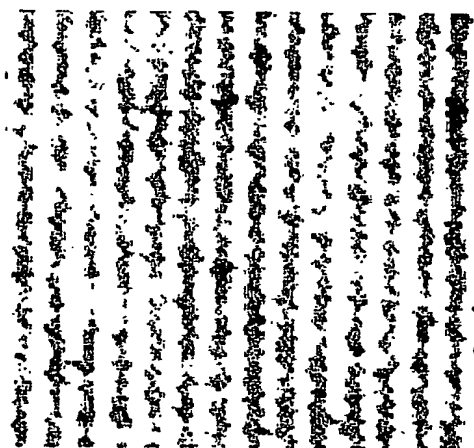
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[Continued on next page]

(54) Title: HOLOGRAPHIC DIFFRACTION GRATING, PROCESS FOR ITS PREPARATION AND ELECTRO-OPTICAL DE-
VICES INCLUDING THE SAME



(57) Abstract: Composite polymer/liquid crystal material having a holographic grating structure formed by an alternating ordered succession of crystal layers. The nematic liquid crystal manophasic region which is substantially free from furthermore, the holo-
graphic grating structure is comprises the steps of: -heating a mixture of a photoinitiator, a monomer Composite polymer/liquid
crystal material having a holographic grating structure of polymer layers and nematic liquid layers comprise an ordered nematic liq-
uid crystal droplets. obtained by a process which above the nematic/isotropic phase separation -illumination of -tion; -slow
cooling of transition and a nematic liquid crystal and the temperature, in order to prevent isotropic/nematic phase transition of the
liquid crystal; mixture at a rate lower than 0.3°C/mixture, to achieve a mixture with an interference pattern to induce polymerisa the
complete orientation of the liquid crystal director, and below the isotropic/nematic transition temperature.

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